

REMARKS

It is respectfully requested that the above-identified application, which was abandoned on June 15, 2003, for failing to respond to an Official Action mailed on March 14, 2003, be revived under the provisions of 37 CFR §1.137(b). A Petition for Revival is being filed concurrently herewith.

This response amends claims 1, 3, 11, 19, 21 and 22, and cancels claims 5, 7, 8, and 9. No new matter has been added.

In paragraph 1, the Official Action objected to claims 3, 7 and 11 due to informalities. In response, applicant has amended claims 3 and 11 so that the relevant passages are in the Markush format. Claim 7 has been canceled. The applicant respectfully submits that the informalities as indicated in paragraph 1 have been overcome and requests that paragraph 1 be withdrawn.

In paragraph 3, claims 5 and 9 were rejected as being indefinite. As claims 5 and 9 have been canceled, applicant requests that paragraph 3 be withdrawn.

Claims 1, 19, 21, and 22 have been amended to make clear that the claims are directed to an inner sole for positioning in footwear to overlies the sole of the footwear.

Claims 1, 13-15, and 17-22 stand rejected as obvious over THEDFORD 4,123,855 in view of HUANG 6,161,240.

THEDFORD teaches an insole 10 formed from two superimposed sheets 12, 14 of a flexible, fluid impervious material enclosing a fluid 16. Ventilating openings 18-25 passing through the two sheets are formed at selected locations in the insole. The sheets are sealed together around the openings. The openings produce a ventilating effect by compressing different parts of the insole as the wearer walks. The openings also control the flow of the fluid by impeding flow in certain paths. THEDFORD does not teach a heat reflective material in the sac between the two sheets, as observed in the Official Action.

HUANG teaches a shock-absorbing cushion 1 formed of an upper sheet and lower sheet, sealed at the periphery, and a plurality of circular recesses 11 with circular wall extending from the lower sheet and linking to the upper sheet. The cushion 1 has a hollow interior with round vertical walls surrounding the recesses. The cushion 1 may be fashioned as shoe inner sole. As described with reference to Figures 23-25 in column 10, line 61, to column 12, line 44, the sheets of the inner sole 5 can be either (1) a polyurethane material which is resistant to air, but easily permeated by water vapor, or (2) one that can be permeated by both air and water vapor. This polyurethane material (1) allows water vapor coming from sweat of a foot to enter the sole when the pressure of the water vapor in the shoe becomes greater

than that in the sole. The water vapor in the sole 5 will form drops to be stored therein when pressure in the sole increases to about 25 psi greater than that in the shoe. After the shoe is taken off, the water vapor in the sole 5 percolates out in the open air. Thus, it is submitted that this particular polyurethane material is not impervious to fluid.

If the material (2) is used in the shoe sole 5, the hollow interior can be filled with air, water, other gas or liquid having the property of heat preserving or cooling. As the material (2) can be permeated by air and water vapor, the foot temperature is cooled or preserved by contact with the water vapor or air permeated through the material (2).

Applicant submits that none of the air, water, other gas and liquid taught by HUANG is heat reflective, as these substances must permeate through the material (2) to come in contact with the foot for the heat transfer to take effect. Moreover, these substances do not reflect heat conducted or convected through the sole of a footwear.

Applicant respectfully submits that amended claim 1 is not obvious to one having ordinary skill in the art as HUANG does not teach an insole formed with fluid impervious sheets and the material in the sac does not reflect heat conducted or convected through the sole of footwear.

The Official Action also rejects claims 2-12 as obvious over THEDFORD in view of HUAG, and further in view of CAMPODONICO et al. EP 0286601 and DEAN et al. 5,704,137.

As mentioned above, THEDFORD's insole 10 while having two superimposed fluid impervious sheets enclosing a fluid 16, ventilation of the foot is provided by openings 18-25 that pass through the sheets. HUANG's sole 5 when formed with air and water vapor permeable material may have its hollow interior filled with air, water, other gas or liquid. The filled substance must come in contact with the foot to cool or preserve foot temperature. Neither THEDFORD nor HUANG disclose the use of a heat reflective material for reflecting heat conducted or convected through the sole of footwear.

CAMPODONICO et al. teach the use of powdered sodium bicarbonate as the deodorant agent and the deodorant action is extended to the user's foot and therefore also to the socks used along with shoes. The powdered sodium bicarbonate is packed in small envelopes instead of in insoles. For the sodium bicarbonate to function as a deodorant the envelopes must be pervious to allow sweat to enter the envelopes. While CAMPODONICO et al. mention the use of a relatively small quantity of zinc oxide in a composition made up of sodium bicarbonate (54.5%), zinc oxide (12.7%), magnesium carbonate (15.45%), boric

acid (4.54%) and ventilated white clay (12.72%), there is no disclosure of its function.

CAMPDONICO et al. teach away from combining with HUANG as HUANG calls for scented deodorants to be incorporated with the fluid system thereby suggesting the use of a liquid deodorant and sodium bicarbonate taught by CAMPDONICO et al. is a powdered material which is not scented.

DEAN et al. teach a hydrodynamic pad for insertion into a midsole of a shoe and the pad extends in an area under the heel of a wearer. The pad has two bladders with a fluid compressible by the heel to move between the bladders. There is no suggestion that the pad can be used as an insole.

Claim 16 is rejected as obvious over THEDFORD in view of HUANG and further in view of OATMAN 4,658,515.

Applicant has argued above that claims 1, 13-15 and 17-22 are non-obvious. Claim 16 is appended to claim 13 which in turn is appended to claim 1. Claim 16 is therefore non-obvious.

OATMAN teaches a heel retention insole 5 contoured to fit in a shoe or boot. In such position, the upper-surface of the insole is in intimate contact with the bottom of the foot of the wearer. The insole has a bottom sheet 10, an upper sheet 20 and an intermediate spacer sheet 30. The spacer sheet is a foamed, organic plastic material for heat insulation, and has laterally spaced apertures 35 filled with particles 40 which may

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move around in the apertures 35. As the insole 5 is for heat retention with the spacer sheet with closed apertures 40, it teaches away from being combined with THEDFORD which uses a flowable fluid in the sole.

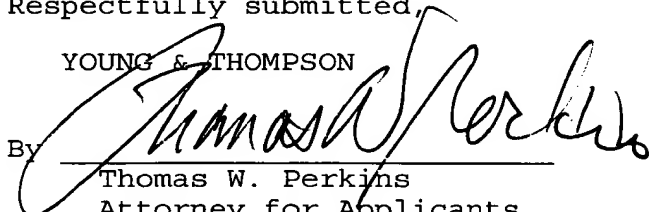
In view of the present amendment and the foregoing remarks, it is believed that the above-identified application is in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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TWP/mjr